

Navy Advancement Center

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Advancement Handbook for Missile Technician

This Advancement Handbook was last revised in: September 1998.

PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs) together with this handbook form a comprehensive examination study package. Since this handbook provides skill and knowledge components for each paygrade of the MT rating, it helps you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 3 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are cumulative; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the “*Exam Expectations*” section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

Prepared by
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Part 1

Advancement Handbook for MT2

Advancement Handbook for MT2

General MT <i>Skill Area</i>	Weapons System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the requirements of the Basic Strategic Weapons Certification Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • The purpose, content and use of all SWS procedural documentation • The duties, authority and organizational relationships of the SWS Chain-of-Command and all SWS watchstanders • The basic purpose of all SWS equipment • The ability to complete preventative maintenance on SWS equipment
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the Basic Strategic Weapons Certification Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Use all SWS procedural documentation • Perform basic preventive maintenance on SWS equipment • Locate all SWS equipment and what its purpose is

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the Requirements of the Missile Compartment Roving Patrol (MCRP) Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to <ul style="list-style-type: none"> - Conduct continuous security and material patrols of all levels of the Missile Compartment forward of Auxiliary Machinery Room #2, inspecting for security violations and material deficiencies. - Assist the CAMP watch and other personnel in rigging the missile compartment for ship's casualties - Maintain the MCRP log • A working knowledge of nuclear weapons safety requirements
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable Instructions and Technical references necessary to complete the Missile Compartment Roving Patrol (MCRP) Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Conduct proper security patrols in the Missile Compartment • Identify a security violation and what actions to take • Take MCRP logs properly • Rig the Missile Compartment properly for all casualties • Apply the nuclear weapons safety rules to your watchstation

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the requirements of the Strategic Weapons System Technician Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • The purpose of the applicable fire control technical references, SOPs, and Officer's Guide • A basic knowledge of all SWS equipment • How to perform tagout procedures, use all safety precautions, and perform proper SWS logkeeping • A detailed knowledge of the safety and security requirements involving the Strategic Weapons System • A working knowledge between the relationships of SWS evolutions and how they affect overall ship activities • How to operate the applicable radiacs used during a missile emergency • How to perform all applicable SWS Standard Maintenance Procedures (SMPs) • How to rig the MC/MCC for all evolutions or casualties • How to prepare all applicable maintenance documents
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the Strategic Weapons System Technician Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Use the proper technical and procedural documentation to perform the duties of the watchstation • Perform maintenance on SWS equipment to include: <ul style="list-style-type: none"> - Tagout procedures

	<ul style="list-style-type: none"> - Nuclear weapons security and safety requirements - Standard Maintenance Procedures - Non-routine maintenance - Fault isolation procedures - Manual troubleshooting of SWS equipment - Logkeeping requirements - Trouble Failure Reports - 3-M Documents • Coordinate SWS evolutions with ship's activities • Use the applicable radiacs during a missile emergency • Rig the MC/MCC during all ship's evolutions/casualties
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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the Requirements of the Control and Monitoring Panel Watch (CAMP) Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<p>How to :</p> <ul style="list-style-type: none"> • Maintain the missile, launcher, weapons power, and other support subsystems in the missile compartment in the condition of readiness as prescribed by the Launcher Supervisor. • Rig the missile compartment for all ship's evolutions and casualties • Maintain designated Missile Compartment Logs • Maintain the Missile Compartment Status Board
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the Control and Monitoring Panel Watch (CAMP) Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Maintain and operate all applicable Missile Compartment systems • Properly take designated Missile Compartment Logs and maintain an accurate Missile Compartment Status Board • Take the proper actions for Security Violations and Nuclear Weapons Accidents or Incidents

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as a fire control troubleshooter during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the FCS - Perform the necessary deferred actions directed by the Fire Control Supervisor - Make the necessary recommendations to the Fire Control Supervisor
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable FCS casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Perform all FCS immediate actions • Assess the impact of the casualty on the FCS • Perform the correct deferred actions for each FCS casualty • Make the proper reports or recommendations to the Fire Control Supervisor

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as a Tube Team Leader during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Launcher System - Perform the necessary deferred actions directed by the Launcher Supervisor - Make the necessary reports to the Launcher Supervisor
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Perform all Launcher Tube Team immediate actions • Assess the impact of the casualty on the Launcher System • Perform the correct deferred actions for each Launcher Tube Team casualty • Make the proper reports or recommendations to the Launcher Supervisor

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General MT <i>Skill Area</i>	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare, update, and maintain specific SWS technical administration programs
<i>Knowledge</i> you should have to perform this skill:	<p>How to:</p> <ul style="list-style-type: none"> • Prepare Unsatisfactory Reports/Information Reports • Update the Maintenance Support Data System (MSDS) • Prepare local changes/procedures for SWS procedural documentation • Maintain the Special Weapons Ordnance Publication (SWOP) library
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • OP 4651 • COMSUBLANT/COMSUBPACINST 8120.2 <i>Submarine Force Nuclear Weapons Manual</i> Chapters 5 and 6 • SWOP 0-1B • SWOP 5-8
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Prepare Unsatisfactory Reports/Information Reports • Update the Maintenance Support Data System (MSDS) • Prepare local changes/procedures for SWS procedural documentation • Maintain the Special Weapons Ordnance Publication (SWOP) library

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General MT <i>Skill Area</i>	Mechanical Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform missile repairs
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Determine the level of maintenance required for the missile repair - Repair missile mechanical fasteners and receptacles - Lockwire the applicable missile component - Perform Missile Receipt/Transfer Inspections - Determine missile repair accept/reject requirements for connectors, LOS/ETS fittings, thermal boots, ground straps, components, and packages
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • SSP OP 4616/4437 • WPs 79 and 84
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Determine the level of maintenance required for the missile repair • Repair missile mechanical fasteners and receptacles • Lockwire the applicable missile component • Perform Missile Receipt/Transfer Inspections • Determine missile repair accept/reject criteria

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General MT <i>Skill Area</i>	Missile Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform missile handling evolutions
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Evaluate missile radiation hazards - Adjust missile rifling during missile loads - Transfer load tubes/missile liners to and from the ship - Install/remove load tubes/missile liners to/from the ship - Load/offload missiles from the load tube to the launch tube
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Nuclear Weapons Radiological Controls Program Manual • Applicable Officer's Guide Casualty Manual • Applicable SOPs for missile handling evolutions
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Evaluate missile radiation hazards • Adjust missile rifling during missile loads • Transfer load tubes/missile liners to and from the ship • Install/remove load tubes/missile liners to/from the ship • Load/offload missiles from the load tube to the launch tube

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General MT <i>Skill Area</i>	Launcher System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate conventional ordnance handling operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • All the knowledge and skills required to completed the certification for Non-Nuclear Ordnance/Explosives Handling Team Leader • Awareness of the basic safety precautions associated with each applicable ordnance device • How to demonstrate proficiency in the handling, transfer, and installation/removal of each applicable ordnance device • How to direct others in the safe and reliable handling, transfer, and installation/removal of each applicable ordnance device
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable ordnance handling SOPs • CINCLANTFLT/CINCPACFLTINST 8023.5A
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<ul style="list-style-type: none"> • The basic safety precautions associated with each applicable ordnance device • How to handle, transfer, and install/remove each applicable ordnance device • How to direct others in the safe and reliable handling, transfer, and installation/removal of each applicable ordnance device

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General MT <i>Skill Area</i>	Mechanical Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Hazardous material storage, use, and disposal precautions
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Use the Hazardous Material User's Guide (HMUG) - Review hazardous material (HAZMAT) inventories - Inspect HAZMAT storage areas - Implement HAZMAT waste disposal - Clean and inspect HAZMAT containers
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • OPNAVINST 5100.19 Chapter 23
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Review the Hazardous Material User's Guide (HMUG) • Review hazardous material (HAZMAT) inventories • Inspect HAZMAT storage areas • Implement HAZMAT waste disposal • Clean and inspect HAZMAT containers

Part 2

Advancement Handbook for MT1

Advancement Handbook for MT1

General MT <i>Skill Area</i>	Weapons System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the requirements of the Fire Control Supervisor Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Maintain all designated Fire Control System and Guidance logs - Maintain the MCC Status Board - Maintain the Equipment Service Log (ESL) - Conduct routine Fire Control System tests and maintenance as prescribed by the Strategic Weapons Officer - Maintain target coverage as directed by the Strategic Weapons Officer - Perform transitions from one condition of readiness to another when directed by the Launcher Supervisor
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the Fire Control Supervisor Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Maintain all designated Fire Control System and Guidance logs • Maintain the MCC Status Board • Maintain the Equipment Service Log • Conduct routine Fire Control System tests and maintenance as prescribed by the Strategic Weapons Officer • Maintain target coverage as directed by the Strategic Weapons Officer • Perform transitions from one condition of readiness to another when directed by the Launcher Supervisor

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General MT <i>Skill Area</i>	Weapons System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Satisfy the requirements of the Launcher Supervisor Qualification Card
<i>Knowledge</i> you should have to perform this skill:	<p>How to:</p> <ul style="list-style-type: none"> • Maintain the required Launcher System Logs • Maintain the Equipment Service Log (ESL) • Maintain the SWS in the condition of readiness as ordered by the Strategic Weapons Officer • Assess any abnormal condition to the SWS and make recommendations to the SWO • Conduct operations, testing and maintenance on the SWS • Originate and route all reports on the SWS to the SWO • Allow entry to the MTADs • Enforce the Two-Man Rule where prescribed • Maintain the required Nuclear Weapons Security Requirements with respect to the applicable SWS
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the Launcher Supervisor Qualification Card
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Maintain the required Launcher System Logs • Maintain the Equipment Service Log (ESL) • Maintain the SWS in the condition of readiness as ordered by the Strategic Weapons Officer • Assess any abnormal condition to the SWS

	<p>and make recommendations to the SWO</p> <ul style="list-style-type: none"> • Ensure all operations, testing and maintenance on the SWS should be conducted in conformance with approved procedures • Originate and route all reports on the SWS to the SWO • Allow entry to the MTADs • Ensure compliance with the provisions of the Two-Man Rule • Maintain the required Nuclear Weapons Security Requirements with respect to the applicable SWS
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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Battle Serve as a CAMP/Launcher troubleshooter during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Launcher System - Perform the necessary deferred actions as directed by the CAMP Battle Stations Watchstation - Make the necessary recommendations to the CAMP Battle Stations Watchstation
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Take immediate actions in accordance with the appropriate CPs • Assess the impact of any casualty on the Launcher System • Perform the necessary deferred actions as directed by the CAMP Battle Stations Watchstation • Make the necessary recommendations to the CAMP Battle Stations Watchstation

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as the LCG Operator during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Launcher System - Perform the necessary deferred actions as directed by the Launcher Officer - Make the necessary recommendations to the Launcher Officer
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Take immediate actions in accordance with the appropriate CPs • Assess the impact of any casualty on the Launcher System • Perform the necessary deferred actions as directed by the Launcher Officer • Make the necessary recommendations to the Launcher Officer

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as a Fire Control Supervisor during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Fire Control System - Perform the necessary deferred actions as directed by the SWO - Make the necessary recommendations to the SWO
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Take immediate actions in accordance with the appropriate CPs • Assess the impact of any casualty on the Fire Control System • Perform the necessary deferred actions as directed by the SWO • Make the necessary recommendations to the SWO

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General MT <i>Skill Area</i>	Missile Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform Missile Closeout Inspections
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • The different types and the proper mating requirements for missile electrical connectors, LOS/ETS fittings, thermal boots, and ground straps • How to: <ul style="list-style-type: none"> - Detect visible damage to all items in the missile - Verify that the battery has not been activated - Verify that missile components are properly mounted - Verify proper retract system alignment
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable missile closeout inspection WP • OP 4437/OP 4616
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Identify the different types and the proper mating requirements for missile electrical connectors, LOS/ETS fittings, thermal boots, and ground straps • Detect visible damage to all items in the missile • Verify that the battery has not been activated • Verify that missile components are properly mounted • How to verify proper retract system alignment

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General MT <i>Skill Area</i>	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare, coordinate, analyze, and administer all SWS administration programs
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Administer The SWS Trouble Failure Report Program - Analyze all Trouble and Failure Report Summary Reports - Prepare SWS log summaries - Inventory and review SWS data packages - Perform refit/patrol planning - Coordinate nuclear weapons security and missile emergency exercises - Coordinate launcher and fire control training exercises - Administer the SWS PMMP and Calibration Recall Programs
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • SSPINST 3100.1 • SSPINST 4355.8 • SSPINST 4720.1 • SSPINST 5600.5 • OP 4651 • Officer's Guide for SSBN 726 Class SWS • Submarine Force Nuclear Weapons Manual • Applicable Procedural Guides for Data Package compilation
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Administer The SWS Trouble Failure Report Program • Analyze all Trouble and Failure Report Summary Reports • Prepare SWS log summaries • Inventory and review SWS data packages • Perform refit/patrol planning

	<ul style="list-style-type: none"> • Coordinate nuclear weapons security and missile emergency exercises • Coordinate launcher and fire control training exercises • Administer the SWS PMMP and Calibration Recall Programs
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Part 3

Advancement Handbook for MTC

Advancement Handbook for MTC

General MT Skill Area	Weapons System Operations
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform the duties and responsibilities of the Strategic Weapons Duty Petty Officer
<i>Knowledge</i> you should have to perform this skill:	<p>How to:</p> <ul style="list-style-type: none"> • Perform inspections of the Strategic Weapons System, noting watchstanders performance, security, and material conditions • Ensure that all SWS operations and duty section evolutions are performed properly and within applicable nuclear weapons safety and security measures • Develop the Strategic Weapons Department watchbill and assign additional watches when needed
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • All applicable instructions and technical references necessary to complete the perform the duties of the Strategic Weapons Duty Petty Officer
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Perform inspections of the Strategic Weapons System, noting watchstanders performance, security, and material conditions • Ensure that all SWS operations and duty section evolutions are performed properly and within applicable nuclear weapons safety and security measures • Write and approve the Strategic Weapons Department watchbill and assign additional watches when needed

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General MT <i>Skill Area</i>	Weapon System Operation
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as CAMP Operator during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Launcher System - Direct the casualty actions of the troubleshooters - Monitor the actions of the GDNC and MSLE teams - Make the necessary recommendations to the Launcher Officer
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Take immediate actions in accordance with the appropriate CPs • Assess the impact of any casualty on the Launcher System • Direct the casualty actions of the troubleshooters • Monitor the actions of the GDNC and MSLE teams • How to make the necessary recommendations to the Launcher Officer

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General MT <i>Skill Area</i>	Weapons System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as the 35MC Announcer during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Make the proper parallel announcements on the 35MC and the X43J-2 - Monitor the X43J-2 to keep the WPNS advised of MC problems - Assist the WPNS in formulating firing orders - Announce any MC casualties during Denote/Prepare Operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Make the proper parallel announcements on the 35MC and the X43J-2 • How to monitor the X43J-2 to keep the WPNS advised of MC problems • How to assist the WPNS in formulating firing orders • How to announce any MC casualties during Denote/Prepare Operations

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General MT <i>Skill Area</i>	Weapons System Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Serve as the Launcher Supervisor during Battle Stations Missile
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Immediate actions required by the appropriate CPs • How to: <ul style="list-style-type: none"> - Assess the impact of any casualty on the Launcher System - Direct the LCG/MC teams in the necessary deferred actions - Make the necessary recommendations to WPNS
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Applicable Launcher casualty procedures and Officer's Guide for SSBN 726 Class SWS
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Take immediate actions in accordance with the appropriate CPs • Assess the impact of any casualty on the Launcher System • Direct the LCG/MC teams in the necessary deferred actions • Make the necessary recommendations to WPNS

Advancement Handbook for MTC

General MT <i>Skill Area</i>	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review and evaluate all SWS Administration Programs
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • How to: <ul style="list-style-type: none"> - Review the SWS Trouble Failure Report Program - Evaluate all Trouble and Failure Report Summary Reports - Review SWS log summaries - Review SWS data packages - Review and implement refit/patrol plans - Evaluate nuclear weapons security and missile emergencies exercises - Evaluate the ship's physical security measures - Evaluate launcher and fire control training exercises - Evaluate the PTEP results
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • SSPINST 3100.1 • SSPINST 4355.8 • SSPINST 4720.1 • SSPINST 5600.5 • OP 4651 • Officer's Guide for SSBN 726 Class SWS • Submarine Force Nuclear Weapons Manual • Applicable Procedural Guides for Data Package compilation
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Review the SWS Trouble Failure Report Program • Evaluate all Trouble and Failure Report Summary Reports • Review SWS log summaries • Review SWS data packages

	<ul style="list-style-type: none">• Review and implement refit/patrol plans• Evaluate nuclear weapons security and missile emergencies exercises• Evaluate the ship's physical security measures• Evaluate launcher and fire control training exercises• Evaluate the PTEP results
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General MT <i>Skill Area</i>	Missile Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate FBM explosive handling operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • An understanding of proper management techniques for the following evolutions: <ul style="list-style-type: none"> - Closure Removal/Installation - Gas Generator Removal/Installation - Closure detonator removal/installation - Missile onload/offload <p>How to:</p> <ul style="list-style-type: none"> • Evaluate the potential sources, conclusions of safety studies and tests, effects on ship and personnel, and actions recommended to prevent and control the following missile casualties: <ul style="list-style-type: none"> - Missile dropped during handling - Missile damaged in launch tube - Missile jammed in launch tube - Inadvertent activation of missile components - Gas generator mishandling • Evaluate damaged missile handling criteria • Evaluate the hazards associated with a damaged missile handling
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • OP 4616/4437 • Officer's Guide For SSBN 726 Class Strategic Weapon System Casualty Manual • Nuclear Weapons Radiological Controls Program Manual
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<ul style="list-style-type: none"> • Proper management techniques for the following evolutions: <ul style="list-style-type: none"> - Closure Removal/Installation - Gas Generator Removal/Installation - Closure detonator removal/installation

	<ul style="list-style-type: none"> - Missile onload/offload • How to evaluate the potential sources, conclusions of safety studies and tests, effects on ship and personnel, and actions recommended to prevent and control the following missile casualties: <ul style="list-style-type: none"> - Missile dropped during handling - Missile damaged in launch tube - Missile jammed in launch tube - Inadvertent activation of missile components - Gas generator mishandling • How to evaluate damaged missile handling criteria • How to evaluate the hazards associated with a damaged missile handling
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General MT <i>Skill Area</i>	Security
A <i>skill</i> you are expected to perform from the General Skill Area above:	Evaluate physical security measures
<i>Knowledge</i> you should have to perform this skill:	<p>How to:</p> <ul style="list-style-type: none"> • Analyze the current threat scenarios and develop drills guides for Reaction Force training • Evaluate the vulnerability of the ship during nuclear weapons moves, increased DEFCONs, non-working hours and holidays, non US ports • Enforce all Nuclear Weapons security requirements • Supervise and monitor all security forces • Evaluate all security force drills
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Submarine Force Nuclear Weapons Manual • Navy Nuclear Weapon Security Manual
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<p>How to:</p> <ul style="list-style-type: none"> • Analyze the current threat scenarios and develop drills guides for Reaction Force training • Evaluate the vulnerability of the ship during nuclear weapons moves, increased DEFCONs, non-working hours and holidays, non US ports • Enforce all Nuclear Weapons security requirements • Supervise and monitor all security forces • Evaluate all security force drills

Appendix 1

References Used in This Advancement Handbook

The references used to develop Missile Technician advancement exams fall into two groups. The first group includes all the publications and instructions listed in the *SWS and FBMWS Documentation Requirements List (DRL)* as required to be carried aboard your submarine. The second group includes those additional publications listed below. Keep in mind that the ONLY publications you need to study prior to a specific exam are the publications listed on the bibliography for that exam.

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
MT2	NAVEDTRA 12045	Military Requirements for Petty Officer Second Class; NAVEDTRA 12045; SN:0502-LP-216-2200		Note 1
	NEETS, Module 1	NEETS, Module 1 -- Introduction to Matter, Energy, and Direct Current; NAVEDTRA B72-01-00-92; SN:0507-LP-217-7300		Note 1
	NEETS, Module 2	NEETS, Module 2 -- Introduction to Alternating Current and Transformers; NAVEDTRA 172-02-00-91; SN:0507-LP-216-2900		Note 1
	NEETS, Module 3	NEETS, Module 3 -- Introduction to Circuit Protection, Control, and Measurement; NAVEDTRA B72-03-00-93; SN:0507-LP-477-6700		Note 1
	NEETS, Module 4	NEETS, Module 4, Introduction to Electrical Conductors, Wiring Techniques, and Schematic Reading; NAVEDTRA B72-04-00-92; SN:0507-LP-217-8300		Note 1

	NEETS, Module 6	NEETS, Module 6, -- Introduction to Electronic Emission, Tubes, and Power Supplies; NAVEDTRA B72-06- 00-92; SN: 0507-LP-217-7900		Note 1
	NEETS, Module 7	NEETS, Module 7 -- Introduction to Solid-State Devices and Power Supplies; NAVEDTRA B72-07-00-92; SN: 0507-LP-218-7400		Note 1
	NEETS, Module 8	NEETS, Module 8 -- Introduction to Amplifiers; NAVEDTRA 172-08-00-82; SN: 0507-LP-172-0801		Note 1
	NEETS, Module 9	NEETS, Module 9 -- Introduction to Wave- Generation and Wave-Shaping Circuits; NAVEDTRA 172-09- 00-83; SN: 0507-LP-172-0900		Note 1
	NEETS, Module 13	NEETS, Module 13 -- Introduction to Number Systems and Logic Circuits; NAVEDTRA B72-13-00-94; SN: 0507-LP-479-5400		Note 1
	NEETS, Module 14	NEETS, Module 14 -- Introduction to Microelectronics; NAVEDTRA 172-14-00-84; SN: 0507-LP- 172-1400		Note 1
	NEETS, Module 15	NEETS, Module 15 -- Principles of Synchros, Servos, and Gyros; NAVEDTRA B72- 15-00-93; SN: 0507-LP-476- 5900		Note 1
	NEETS, Module 16	NEETS, Module 16 -- Introduction to Test Equipment; NAVEDTRA B72- 16-00-96; SN: 0507-LP-481- 2700		Note 1
	SPARWAR EE730-MA-OMI- 010/8153-PDR56	Operation and Maintenance Instructions Radiac Set AN/PDR-56		Note 1
	NAVELEX EE710- BA-OMI-010/8153-	Operation, Maintenance, and Instructions Radiac Set		Note 1

	PDR27	AN/PDR-27		
	SPARWAR EE730-HA-OMI- 010/8153-PDR73	Operation and Maintenance Instructions Radiac Set AN/PDR-73		Note 1
	CINCLANFLT/ CINPACFLTINST 8023.5	Non-nuclear Ordnance Explosives Handling Qualification and Certification Program		Note 2
	OPNAVINST 5100.19	Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat	Chapter 23	Note 3
	S9436-AG-MMA- 010/96169	Indication, Control, and Alarm System (ICAS)	Volumes 1-5	Note 1
	S9438-AF-MMA- 010/12436	Control and Monitoring Panel	Volumes 1-3	Note 1
	S9438-AA-MMA- 010/12436	Tube Interface Box (TIB) Tube Indication Panel (TIP) Tube Pressurization Status Panel (TPSP)	Volumes 1 and 2	Note 1
	SWSSSM (D5)	SSBN 726 Class Strategic Weapon System Support Systems Manual (D5)	Volumes 1-5	Note 1
	SWSSSM (C4)	SSBN 726 Class Strategic Weapon System Support Systems Manual (C4)	Volumes 1-5	Note 1
	NAVSUP P-485	Afloat Supply Procedures		Note 1
	NAVSEA S9505- AF-MMA-010	Submarine Non-nuclear Piping Systems Test Manual		Note 1
	NSTM	Chapter 504 Pressure, Temperature and Other Mechanical and Electromechanical Measuring Instruments		Note 1
	COMSUBLANT/ COMSUBPACINS T 8120.2	Submarine Force Nuclear Weapons Manual		Note 4
	OPNAVINST 4790.4	Ship's Maintenance and Material Management (3-M) Manual		Note 3
MT1	NAVEDTRA 12046	Military Requirements for Petty Officer First Class		Note 1
	NAVSEA TW120- AA-PRO-010	Nuclear Weapons Radiological Controls Program		Note 5

	OPNAVINST C8126.1	Navy Nuclear Weapon Security Manual		Note 6
	CINCLANTFLT/ CINCPACFLTINS T 4790.3	Joint Fleet Maintenance Manual	Volumes 1-5	Note 7
MTC	NAVEDTRA 10047-A	Military Requirements for Chief Petty Officer		Note 1
	DOD 5100.52	Nuclear Weapon Accident Response Procedures (NARP) Manual		Note 1

LEGEND:

Note-1: To order, MILSTRIP to NAVICP PHILA or via internet @
<http://www.nll.navsup.navy.mil>

Note-2: Fleet Publications Library CD-ROM:

Ltr request to: Commanding Officer
Attn CD-ROM Team Code N911
NCTAMS LANT
9625 Moffett Ave
Norfolk VA 23511-2784

Note-3: Internet @ <http://neds.nebt.daps.mil/>

Note-4: Ltr request to: Commander Submarine Force

U.S. Atlantic Fleet
7958 Blandy Rd
Norfolk VA 23551-2492

Note-5: Ltr request to: Commander

Indian Head Division
Naval Surface Warfare Center
101 Strauss Ave
Indian Head, MD 20640-5035

Note-6: Ltr request to: Chief of Naval Operations N09N

2000 Navy Pentagon
Washington DC 20350

Note-7: Internet @ <http://www.submepp.navy.mil.PRODSERV.HTM>